THE MASTER JUMPMASTER UPDATE

Visit our Website: WWW.BRAGG.ARMY.MIL/AAS **APRIL 2004**

CONDUCTING UNIT BAR

SGT(P) BRYAN A MALONE
USA AAS INSTRUCTOR

Due to the recent redeployment of units from Afghanistan and Iraq, there are many units and soldiers on Fort Bragg that need Basic Airborne Refresher (BAR). The best way to get soldiers within your unit refreshed is to conduct a Unit BAR or attend a USA AAS scheduled BAR.

Coordination: In order for a unit to schedule the training area you must first contact the US Army Advanced Airborne School at 396-9023/2420 and see what days the towers are open for use. A memorandum signed by the unit commander or S-3 requesting the use of the tower must be submitted before the tower will be scheduled for your unit. The memorandum can be dropped off, emailed to the Tower Committee Chief at 82djumpmtrinst@bragg.army.mil or rowlandrt@bragg.army.mil, or faxed to COM (910) 396-8693 or DSN 236-8693. **The memorandum must state the date of use, number of personnel attending training, the type of training scheduled, times, and facilities utilized**.

Note: The towers will not be scheduled for use on days that the USA AAS is conducting BAR, PWAC, JMPI testing, or tower inspection and maintenance.

Units must also schedule their own medical coverage team consisting of:

1. FLA
2. Two Medics (1 NCO, 1 ENL)
3. Spine Board
4. Rigid Collar
5. Respirator

Jumpmasters assigned to run the tower must read and be familiar with the tower usage SOP located on the USA AAS website at http://www.bragg.army.mil/aas under the tower link.

Requirements: Prior to the towers being inspected and signed out, the FLA must be present.

Also, two copies of a memorandum with each trainee's standard name line must be provided to the school. One copy will be stamped and returned to the unit and one maintained at the USA Advanced Airborne School.

Each unit must provide their own current jumpmasters. There must be 1 jumpmaster per active paratroop door; also 1 jumpmaster per paratroop door on the ground to observe jumpers and ensure they make one satisfactory exit. There will also be a minimum of two jumpmasters on the ground to JMPI jumpers. Jumpmaster exiting jumpers must be current.

Units must provide enough soldiers to successfully run the mound detail and the rope detail. Units using both tower doors will have six soldiers for rope detail. (1 per active cable.) Twelve soldiers (2 per active cable) will be needed for mound detail. This number increases to 18 (3 per active cable) if combat or special items of equipment are to be exited. Soldiers performing mound detail or rope detail must wear their ballistic helmet with parachutist retention strap secured at all times.

If your unit has been tasked with a weekend training event, civilian personnel can be substituted for detail personnel. Keep in mind ballistic helmets must be provided for these individuals and they must be briefed and supervised. **The following equipment needs to be present and inspected by a current and qualified jumpmaster prior to arriving:**

1. Ballistic Helmet or Advanced Combat Helmet (ACH)
2. Harness Single Point Release
3. Hook Pile Tape Lowering Line
4. ALICE Pack or MOLLE (35 lbs)
5. ID Card and ID Tags on long and short chains

Units will bring their own safety kit with enough expendables to conduct a RIGEX and correct any deficiencies found by the US Army Advanced Airborne School Cadre.

Execution: On the day of operation the training area will be inspected prior to and upon completion of the mission. Units will receive a tower safety book with the Tower SOP, Joint Inspection Checklist, DA Form 2062, and blank Risk Management Worksheet.

The inspection will begin **NLT 0800** hours on the day of execution. Any discrepancies will be immediately reported to the Tower Committee Chief.

Unit commanders will assume all responsibility for training conducted in the tower training area. In the event of inclement weather (i.e. rain, excessive wind) jumpers will not exit from the tower. **This is a decision that will be made by the commander, 1SG, or black hat signing out the tower.**

Once the towers have been inspected, soldier will be formed up and the roster verified. Unit Jumpmasters will be briefed on inspection criteria and will inspect 40% of the trainees. Black hats will inspect the remaining 60% and deficiencies will be fixed on the spot or jumpers with deficiencies will be released from training. **Keep in mind all jumpers must have air items and their own ballistic helmet or ACH**. This is a safety inspection and the items a jumper intends on using must be present.

The unit will then receive a mandatory fitting and wearing class given by one of the USA AAS instructors. **SEE FIGURE 1 BELOW.**

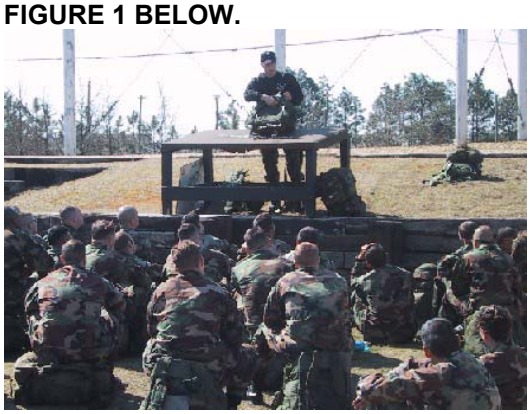

FIGURE 1

Unit Jumpmasters will conduct the entire Sustained Airborne Training (to include all emergency landings and both types of main parachutes), 4 satisfactory Parachute Landing Falls, and Mock Door Training with SARJE brief. All events will be conducted in designated areas with all participants to include jumpmasters wearing an ACH or ballistic helmet. **Unit BAR will not serve as Sustained Airborne Training for an airborne operation following BAR.** A RIGEX with ALICE Pack or MOLLE, Harness Single Point Release, and HPT Lowering Line will also be conducted. **SEE FIGURE 2 BELOW.**

FIGURE 2

Prior to exiting personnel from the tower, the jumpers and appropriate details must be briefed on the conduct of their duties. **Ensure the mound detail does not attempt to stop a jumper until after reaching the stop cable. SEE FIGURE 3 BELOW.**

FIGURE 3

Jumpmasters: Allow no more than three jumpers per door per level on the tower landings. Only the Jumpmasters for each paratroop door will be present on the top level (wearing safety harnesses), and **ensure risers are controlled with both hands.**

In the event a parachute harness becomes unserviceable during use, place it inside the conex and label it for identification and repair.

For further information pertaining to the execution, consult the SOP on the web at http://www.bragg.army.mil/aas at the tower link or contact the US Army Advanced Airborne School Tower Committee at 396-9023.

Training will culminate with police call of the entire training area used, raking of the PLF pit, and cleanup of the latrine and vending machine area. The tower will not be inspected and cleared until cleanup is complete.

Getting Credit: Upon successful completion of training and after the tower has been cleared, one copy of the unit roster (memorandum) will be returned the OIC/NCOIC or S-3 Air. Unit BAR is the best way to ensure jumpers receive the training they need, leaders identify their subordinates strengths and weaknesses, and deficiencies get corrected to conduct safe and efficient airborne operations.

RIGGING THE SMAW-D

SSG(P) SHANE SUMMERS
USA AAS INSTRUCTOR

Over the last year, many Jumpmaster students have been asking about the rigging of the SMAW-D or Shoulder-Launched Multipurpose Assault Weapon-Disposable.

The SMAW-D can be jumped as a special item of equipment. However, **it cannot be jumped under the top closing flap of the ALICE Pack** like the Light Anti-Tank Weapon (LAW). **SEE FIGURE 1 IMPROPERLY RIGGED BELOW.**

FIGURE 1

The SMAW-D is 31.8 inches in its shortest configuration. The maximum width that can be jumped is 30 inches due to the width of the paratroop door. The SMAW-D can be rigged to be jumped as a tandem load or as a single item of equipment.

The qualifications, currency and limitations of the SMAW-D are the same as those of an AT-4 Jump Pack (AT-4JP):

Qualifications:

1.Must be at least 5’6” in height.

2.Must have at least 12 static line jumps from Air Force aircraft.

3.Must make two perfect exits from the right paratroop door of the 34’ jump tower.

4.Must be talked through the five points of performance and proper lowering procedures while in the suspended harness.

Currency:

1.Must exit an Air Force aircraft at least once every 180 days or reattend tower training.

Limitations:

1.No more than 12 AT-4JPs can be exited per pass.

2.The AT-4JP cannot be exited from any aircraft that requires the jumper to exit in a seated position.

3.The AT-4JP cannot be exited from the left paratroop door.

4.Only the M-16 series rifle and the M-4 carbine can be placed in the AT-4JP.

5.The M-1950 weapons case cannot be used with the AT-4JP.

6.When exiting A-series containers, the #1 jumper cannot be rigged with the AT-4JP.

Rigging of the SMAW-D: Place the pack body over so that the ¼ inch thick felt pad is facing skyward. Remove all twists from the securing straps. Place the SMAW-D into the pack body with the launcher forward end secured in the launcher forward end bridle, and the sling facing down. **SEE FIGURE 2 BELOW.**

FIGURE 2

Rotate the other portion of the pack body over and secure the side securing straps to their appropriate friction adapters.

Tighten the side securing straps and incorporate a quick release fold (a quick release with the excess the same length as the quick release). Secure all four plies of the side securing straps using masking tape or retainer bands, always one, never both, and there is no preferred method.

Now position the AT-4JP so that the launcher aft end is facing skyward. At this time you will secure 3 pieces of 6-inch by 6-inch paperboard honeycomb. Place the paperboard honeycomb inside the AT-4JP to fill the empty space inside the AT-4JP. This is due to the fact that the SMAW-D is shorter than an AT-4. **SEE FIGURE 3 BELOW.**

FIGURE 3

Now place two pieces of 7-inch by 7-inch paperboard honeycomb on top of the AT-4JP.

Route the launcher aft end securing strap, with the permanently sewn strap keeper, over the paperboard honeycomb and secure it to its friction adapter and remove the slack. Do not incorporate a quick release or quick release fold.

Secure the other launcher aft end securing strap and route it through the permanently sewn strap keeper. Then, secure it to its friction adapter and remove the slack. Tighten down on both launcher aft end securing straps evenly. Roll the free running ends, hand over hand, and secure with a sufficient length of ¼ inch cotton webbing with a single or double loop bow knot. **SEE FIGURE 4 AT RIGHT.**

FIGURE 4

To ensure that the launcher aft end securing straps do not slide off the paperboard honeycomb, secure a sufficient length of ¼ inch cotton webbing and route it around the outside of the launcher aft end securing straps, and under the 7-inch by 7-inch paperboard honeycomb. Secure it with a single or double bow knot on the outside of the one of the launcher aft end securing straps. **SEE FIGURE 5 BELOW.**

FIGURE 5

Now rotate the AT-4JP over so that the launcher forward end bridle is facing skyward. Route the launcher forward end securing strap under the launcher forward end bridle, and secure it to the friction adapter. Once again do not incorporate a quick release. Tighten the free running end hand over hand, and secure it with a sufficient length of ¼ inch cotton webbing tied in a single or double loop knot.

Route the quick release link through the D-ring and attach the quick release snap. Ensure that the opening gate, snap fastener, quick release snap is facing away from the pack body.

The SMAW-D is rigged and jumped as a single item of equipment in the same manner as the AT-4. A lowering line attachment strap and hook pile tape lowering line are utilized. **SEE FIGURE 6 BELOW.**

FIGURE 6

The SMAW-D is rigged and jumped as a tandem load with the ALICE or MOLLE pack in the same manner as the AT-4. A modified hook pile tape lowering line routed through the d-ring on the side of the AT-4JP, the upper chape loop, and the d-ring on the launcher forward end bridle. **SEE FIGURE 7 BELOW.**

FIGURE 7

Keep in mind this is a special item of equipment and should be rigged 24 hours prior to manifest call and must be rigged no later than 1 hour prior to manifest call. This item will be attached to the jumper at the 20 minute time warning.

PREPARING AND SHIPPING LITHIUM BATTERIES ON MILITARY AIRCRAFT

SSG THOMAS COCHRAN
USA AAS INSTRUCTOR

Any unit deploying will have to ship lithium batteries as a hazardous material, (Class 9) and it must be properly packaged and documented prior to shipment by military air.

The shipper must first review Chapter 3 of TM 38-250, paragraph 3.8 and Attachment 13.8) and identify how the batteries must be prepared for shipment. The Shippers Declaration for Dangerous Goods (SDDG) will be prepared utilizing the three possible proper shipping names: **LITHIUM BATTERIES** or **LITHIUM BATTERIES CONTAINED IN EQUIPMENT**, or **LITHIUM BATTERIES PACKED WITH EQUIPMENT**.

The rest of the SDDG will be filled out as usual IAW Attachment 17. However, Key 16, (Type and Quantity of Packaging) the mathematical computation for this hazard, will be expressed in grams. To determine the grams of lithium per battery you must refer to the Material Safety Data Sheet or MSDS for the battery. Multiply the total grams of lithium per battery by the number of batteries per package.

The MSDS's for lithium batteries may be found on the Internet at various sites. A common site that has a search engine for MSDS is http://hazard.com/msds. Go to this website and type the National Stock Number for the battery into the search text box and a link to the MSDS for that item will be listed. Copy or print the information for future use.

In order to utilize the Proper Shipping Name **LITHIUM BATTERIES**, the batteries must be packed in a suitable container such as a fiberboard box, plywood box, or the container used by the manufacturer to ship the batteries. In this case, the outer package for the battery of batteries will be the box. **SEE FIGURE 1 NEXT PAGE.**

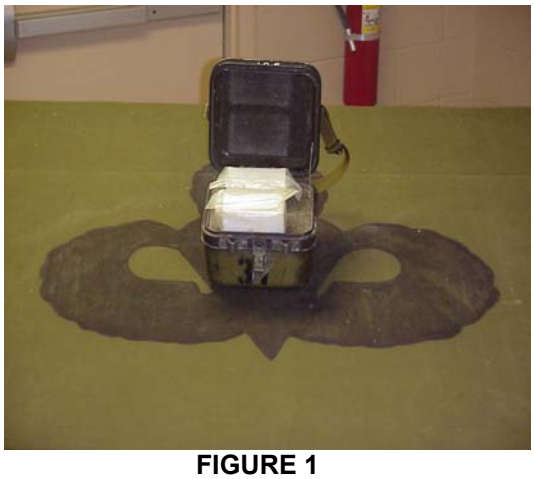

FIGURE 1

However, in order to utilize the Proper Shipping Name **LITHIUM BATTERIES CONTAINED IN EQUIPMENT**, or **LITHIUM BATTERIES PACKED WITH EQUIPMENT**, the batteries must be inside a piece of equipment while in transit. In this case, the outer package for the battery or batteries will be the item of equipment. Lithium Batteries cannot be packed inside containerized such as Conexes, ISU 90, QUADCON, etc. **SEE FIGURE 2.**

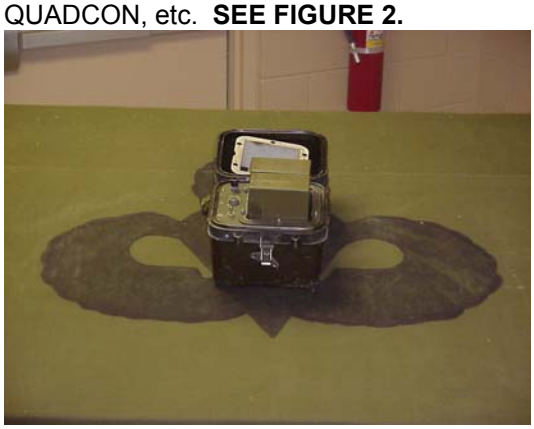

FIGURE 2

When shipping lithium batteries contained in or packed with equipment refer to TM 38-250, A13.8.3. Pack equipment with installed lithium batteries in a strong waterproof outer packaging or in an outer packaging made waterproof through the use of a liner (unless the equipment is made waterproof by nature of its construction). Secure the equipment within the outer packaging to prevent movement, short circuit, or accidental operation during transport. UN specification packaging is not required. When packing cells and batteries with equipment it must be packed in inner packaging as identified above in paragraph A13.8.2 and secure to prevent movement and short circuits.

Do not pack more than 5 kg of cells or batteries with each item of equipment.

There are many new styles of lithium batteries that are being used by the military at this time and are not listed in TM 38-250; therefore, in order to find the certification requirements for them, the shipper must find the MSDS for them.

NEW LITHIUM BATTERIES: There are certain requirements that must be followed when shipping lithium batteries by military air. No cell may contain more than 12 grams of lithium or lithium alloy and no battery may contain more than 500 grams. Each cell and battery must be equipped with an effective means of preventing external short circuit. **SEE FIGURE 3 AT RIGHT.**

FIGURE 3

Each cell and battery must incorporate a safety-venting device or be designed in such a manner that will preclude a violent rupture under any condition incident to transportation, such as a dead short. Batteries containing cells or series of cells connected in parallel must be equipped with diodes to prevent reverse current flow.

TM 38-250 lists commonly used lithium batteries and lithium batteries manufactured according to MIL-B-49430. These batteries are: BA-5093/U, BA-5112/U, BA-5372/U, BA-5513/U, BA-5557/U, BA-5567/U, BA-5588/U, BA-5590/U, BA-5598/U, BA-5599/U, BA-5600/U, BA-5800/U, BA-5847/U, BA-6598/U.

USED LITHIUM BATTERIES: The most difficult lithium battery to ship is a used lithium battery. Used batteries may be transported by military air as authorized by Chapter 3, paragraph 3.8 and must be individually wrapped in nonconductive material and placed in a strong outer container with at least one-inch of inert material surrounding each battery.

No battery may be transported if any cell has been discharged to the extent that the open circuit voltage is less than two volts or is less than two-thirds of the voltage of the fully charged cell, whichever is less. That means that each individual battery must be tested with a multi-meter to ensure the above standards are met.

The packaging of new lithium batteries for shipment by air must be in compliance with TM 38-250, A13.8.2.

Package the cells and batteries in strong inner packaging containing not more than 500 grams of lithium or lithium alloy per inner package.

Pack inner packaging inside an outer metal box, wooden box, fiberboard box, or solid plastic box, fiber drum, metal drum, plywood drum, plastic jerrican, or metal jerrican. Packaging must meet PG II performance level.

Lithium Batteries are a miscellaneous hazardous material; however, as a shipper, all certifiers must understand the proper certification requirements for these materials.

If you have any questions concerning air shipment of hazardous materials contact the AMO committee at 432-5601 or 396-9023.

ASK A JUMPMASTER

To test your JM and AMO knowledge, and stimulate conversation about airborne/air movement procedures, we will periodically publish a short quiz with questions that relate to or are about airborne/air movement procedures. Most questions will be from the ASOP or RSOP and other airborne or air movement manuals.

Some of the questions may require some imagination in researching or finding out the answer. The answers will be published in the subsequent newsletter. Good luck and if you get stuck, ask a Jumpmaster.

1. Where is the HEPI placed for a daytime CARP drop?

2. Packaging instructions are located where on the SDDG?

3. When exiting an A-Series container, who must have ripcord grip inserts?

4. Spontaneously combustible materials are what class of hazardous material?

5. What markings must be present on the body of a replacement D-ring for it to considered serviceable?

********Jumpmaster Bonus********

What is the minimum size drop zone required for an airborne operation for 25 personnel utilizing both paratroop doors from 2 C-17s flying in staggered trail formation at night from 1500ft AGL?

**********AMO Bonus**********

What four factors must be considered when stowing hazardous materials on an aircraft?

Paratroopers desiring to take the Pre-test can find all testable nomenclature at the United States Army Advanced Airborne School website:
WWW.BRAGG.ARMY.MIL/AAS.

Here are the Answers to last month's Master Jumpmaster Update questions:

1. What are the qualifications of the Malfunctions Officer that is part of the DZSO Party? **Corporal or above, qualified rigger from the unit providing air items.**

2. What are the two types of assembly aids for an airborne operation? **Natural and Mechanical**

3. How many Jumpmasters, safeties and current Jumpmasters must you have when conducting C-130 in-flight rigging operations? **One Primary Jumpmaster, one Assistant Jumpmaster, two Safeties, and four additional Jumpmasters throughout the stick.**

4. Define the meaning of minor and major deficiencies? **A minor deficiency is any discrepancy in the rigging or donning of the jumper's equipment that could cause injury to the jumper, or a violation of standard rigging procedures outlined in the ASOP. A major deficiency is described as any deficiency that could cause loss of life or serious injury to the jumper. Additionally, it is defined as any deficiency in the rigging of the main or reserve parachutes that would question the manner in which it was packed.**

5. What is the maximum amount of fuel that can be carried on a vehicle that will be placed on any aircraft cargo ramp? **Vehicles are limited to ½ tank.**

**********Jumpmaster Bonus**********

What information is contained in the Jumpmaster Packet? **Chalk manifest, Jumpmaster packet summary checklist, Key personnel matrix, Aircraft load plan, Landing plan, Assembly plan, Aborting instructions, Map of surrounding area, and Bump plan.**

**********AMO Bonus**********

What are the HAZMAT certification requirements for DOT 5L Jerricans? **If it contains or has contained a flammable liquid, it must be labeled and marked on a broad and narrow side with PSN, UN Number, Class 3 Flammable Liquid label, and Flash Point. An SDDG must also accompany the shipment. If it has not contained a flammable liquid, marking, labeling and certification is not required.**

The Master Jumpmaster Update is a periodic publication produced by the cadre of the United States Army Advanced Airborne School. Please direct any comments or questions to the cadre of the United States Army Advanced Airborne School at (910) 396-6581/9023 or (910) 432-5601/5605 or email us at 82djumpmtrinst@bragg.army.mil

Commander CPT Beaudoin
1SG 1SG Hankins
Jumpmaster Committee Chief
SFC Yates
Tower Committee Chief
SSG Rowland
AMO Committee Chief
SFC Erazo
Free Fall Team Leader
SFC Fleming

ALL THE WAY!